REMARKS

Claims 1 - 7 are pending in the present application, of which claim 1 has been amended. Applicant respectfully submits that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated January 23, 2003.

AS TO THE MERITS:

As to the merits of this case, the Examiner maintains the following rejections:

claims 1 - 5 and 7 stand rejected under 35 U.S.C. §102(b) as being anticipated by **Nichols, et al.** (U.S. Patent No. 5,818,137); and

claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over **Nichols, et al.** in view of **Tajima, et al.** (U.S. Patent No. 5,432,644).

Both of these rejections are respectfully traversed.

Claim 1, as amended, now recites that *the first and second sets of windings are disposed on a single yoke plate made of a magnetic material, wherein said single yoke plate is the only yoke plate employed to wind said first and second sets of windings.*

It is respectfully submitted that **Nichols** fails to disclose or fairly suggest the feature concerning a single yoke plate that is the only yoke plate employed to wind the first and second sets of windings, as called for in claim 1, since **Nichols** includes two yoke plates 36, 36, between which a plurality of permanent magnets, 38, 38a are disposed.

Therefore, **Nichols** utilizes two yoke plates 36, 36 on which two sets of coils 40, 42 are wound. On the other hand, the present invention comprises only one yoke plate, and thus the height of the apparatus can be reduce.

In addition, Applicant respectfully concurs with the Examiner's conclusion that "the claims do not state that the claimed invention must not use permanent magnets."[1] In other words, permanent magnets can be used in the present claimed invention to generate the floating force. For example, an embodiment, as illustrated in Fig. 12 and described on page 14 of the present specification, includes a permanent magnet 22 which is utilized to improve the rigidity of the translation in the z-axis direction, and the gradients θy and θx around the X and Y axes. Thus, the magnet 22 contributes to generating a floating force in this embodiment.

Accordingly, claim 1 is not described in **Nichols** and thus none of claims 2 - 5 and 7 (dependent thereon) is described therein. Claim 6 is dependent from claim 1, and hence is not obvious from **Nichols** and **Tajima**.

[1]Please see, lines 3 - 4, page 6 of the January 23, 2003 Official Action.

In view of the aforementioned amendments and accompanying remarks, claims 1 - 7 are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**<u>Version with markings to show changes made</u>**."

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Version with markings to show changes made

VERSION WITH MARKINGS TO SHOW CHANGES MADE 09/875,134

IN THE SPECIFICATION:

The paragraph beginning on line 14, page 14 of the current Specification has been AMENDED to read as follows:

Fig. 12 illustrates an exemplary structure for improving the rigidity of the passive control axes (passive stability axes), i.e., translation in the Z-axis direction, θy gradient, and θx gradient. Here, a permanent magnet 22 is disposed at an inner peripheral end of the top surface of the stator yoke plate 6 such that the poles of the magnet 22 are positioned in the Z-axis direction. By disposing the permanent magnet 22 at the inner leading end on the top surface of the stator yoke plate 6, the magnetic fluxes Φ1 flow upwardly from the top surface of the ring-shaped rotor 7, causing a suction force to act in the Z-axis direction relative to the rotor 7. In this way, it is possible to improve the rigidity of the passive stability axes, i.e., translation in the Z-axis direction, θy gradient about the X-axis, and θx gradient about the Y-axis. Alternatively, the permanent magnet 22 may be disposed on the top surface of the ring-shaped rotor 7 to flow magnetic fluxes upwardly from the top surface of the rotor 7. For reference, in Fig. 1[3]2, Φ0 designates a magnetic fluxes for rotation driving and position control.

IN THE CLAIMS:

Claim 1 has been AMENDED to read as follows:

1. (Amended) An apparatus for rotating a semiconductor substrate comprising a substrate holder for carrying the substrate thereon, a rotor for directly or indirectly supporting the substrate

holder, a magnetic floating mechanism for magnetically floating and supporting the rotor in a non-contact state, and magnetic rotating mechanism for magnetically rotating the rotor, wherein

the magnetic floating mechanism and magnetic rotating mechanism are formed as a single integral unit structure,

the unit structure includes a first set of windings for generating a magnetic field to provide the rotor with a rotating force, and a second set of windings for generating a magnetic field to float and support the rotor at a predetermined position,

the first and second sets of windings are disposed on a single yoke plate made of a magnetic material,

wherein said single yoke plate is the only yoke plate employed to wind said first and second sets of windings.